

Application No.: 10/800,230

Docket No.: TOW-067

**REMARKS**

Further to the claim amendments in the Response filed on September 13, 2007, Applicants amend independent claim 4 to incorporate the previously presented feature of claim 5. Claims 1, 3, 4, 6 and 7 are currently pending, of which claims 1 and 4 are independent. No new matter has been introduced.

Further to the remarks in the Response filed on September 13, 2007, Applicants respectfully submit the following arguments.

**Rejection of Claim 4 under 35 U.S.C. §102**

Claim 4 was rejected under 35 U.S.C. §102(b) as being anticipated by United States Patent Publication Number 20030008186 to Dickman et al (hereafter "Dickman").

The Dickman reference is generally directed to a feedstock mixing apparatus for fuel processing systems. The fuel processing system includes one or more fuel processors adapted to produce a product hydrogen stream from a feed stream containing water and a carbon-containing feedstock. The fuel processing system may also include one or more fuel cell stacks that are adapted to produce an electric current from the product hydrogen stream produced by the fuel processing system.

Applicants respectfully submit that the Dickman reference does not disclose at least "a cooling mechanism provided between said reforming mechanism and said PSA mechanism," as recited in amended independent claim 4. The Dickman reference does not disclose a cooling mechanism between the reforming region 32 and the purification region 38 (Dickman, Figure 15).

In light of the foregoing arguments and the arguments in the Response filed on September 13, 2007, Applicants respectfully submit that the Dickman reference does not disclose each and every element of independent claim 4. Applicants respectfully request that the 35 U.S.C. §102(b) rejection of claim 4 in view of the Dickman reference be withdrawn. Reconsideration and allowance of claim 4 is requested in view of the above remarks.

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**Rejection of Claim 1 under 35 U.S.C. §102**

Claim 1 was rejected under 35 U.S.C. §102(e) as being anticipated by United States Patent Publication Number 2003/0046867 to Woods (hereafter "Woods").

The Woods reference is generally directed to systems for generating hydrogen gas for use industrial and fuel cell applications. HRSG 90 in the Woods reference corresponds to the cooling mechanism of the present invention. In the Woods reference, water 17 used for reforming is introduced through pipes 18 to pass through HRSG 90 (Woods, paragraph 39). Therefore, it is not possible for HRSG 90 to evaporate the water 17 to get sufficient steam until the gas passing through discharge pipe 74 of ATR 70 becomes hot.

Applicants respectfully submit that the Woods reference does not disclose at least "a cooling mechanism provided between said reforming mechanism and said PSA mechanism," as recited in independent claim 1. The Woods reference does not disclose that HRSG 90 or any cooling mechanism is provided between a reforming mechanism and a PSA mechanism.

**Rejection of Claim 4 under 35 U.S.C. §103**

Claim 4 was rejected under 35 U.S.C. §103(a) as being unpatentable over the Woods reference in view of the Dickman reference. In view of the above arguments in connection with claims 1 and 4, and the arguments in the Response filed on September 13, 2007, Applicants respectfully submit that the Woods and Dickman references, alone or in any combination, fail to teach or suggest at least the following feature of amended independent claim 4: "a cooling mechanism provided between said reforming mechanism and said PSA mechanism."

Applicants respectfully submit that a combination of the Woods and Dickman references does not teach or suggest each and every element of independent claim 4. Applicants respectfully request that the 35 U.S.C. §103(a) rejection of claim 4 in view of the Woods and Dickman references be withdrawn. Reconsideration and allowance of claim 4 is requested in view of the above remarks.

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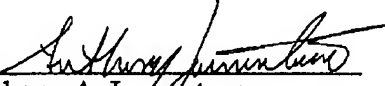
**CONCLUSION**

In view of the foregoing amendments and arguments, Applicants believe the pending application is in condition for allowance.

Please charge our Deposit Account No. 12-0080 for the two-month extension fee under Order No. TOW-067 from which the undersigned is authorized to draw.

Dated: November 9, 2007

Respectfully submitted,

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